	Mathematics for Humanities
Description	● Set Theory and Elements of Mathematical Logic with references to their basic concepts (union, intersection, symmetric difference, etc.). Propositional, categorical calculus, inference and their simple applications in language game creation and sentence/text comparison. ● Mathematical Calculus (Functions), with references to the basic concepts of functions (graph, continuity, derivative, integral, etc.) with related exercises and examples. ● Linear Algebra (Vectors, Matrices, Linear Spaces), with examples of representation in space and simple applications of vectors and matrices to represent collections of text, compare text, and extract terms/non-important words. ● Probability and Statistics, with references to the basic concepts (random variables, bounded probability, discrete and continuous distributions, mean, variance, probability functions and Bayes approximation) and their simple applications in the description of texts/corpses of texts. ● Simple Python scripts to implement simple computational models of mathematical concepts.
Learning Outcomes	After the course the student will be able to ● understand and handle basic mathematical concepts and tools as a background for research in Digital Humanities.